

WHAT IS CLAIMED

1. A gearless cable-operated elevator with a drive sheave drive twice wrapped by several parallel carrier cables, with counter sheave (3), a cage (6), guide rails for said cage (6) and a counterweight (11), for a machine-room-free installation in particular, characterized in that said carrier cables run in semicircular grooves and the ratio of drive sheave diameter to nominal diameter of said carrier cables is 40.
2. The gearless cable -operated elevator under claim 1, characterized in that the ratio of drive sheave diameter to nominal diameter of said carrier cables essentially is 30.
3. The gearless cable-operated elevator under claim 1 characterized in that said drive grooves are without interference.
4. The gearless cable-operated elevator under claim 1, characterized in that said drive grooves have minor interference, preferably interference of 1 to 3 mm.
5. The gearless cable-operated elevator under claim 1, characterized in that said carrier cables have a nominal diameter between 5 to 7 mm, 6 mm in particular.
6. The gearless cable-operated elevator under claim 1, characterized in that it is configured for useful cage loads of up to 2000 kg and that it comprises carrier cables with a nominal diameter of essentially 7 mm, the ratio of drive sheave diameter of essentially 7 mm, the ratio of drive sheave diameter to nominal diameter of said carrier cables preferably being about 34.
7. The gearless cable-operated elevator under claim 1, characterized in that it is configured for useful cage loads up to 2000 kg, between 300 kg and 1000 kg in particular.

8. The gearless cable-operated elevator under claim 1, characterized in that said counter sheave (3) simultaneously is a distancing deflection sheave.
9. The gearless cable-operated elevator under claim 1, characterized in that for adaptation to the occurring cable forces alone the number of applied carrier cables is variable in said drive sheave drive.
10. The gearless cable-operated elevator under claim 1, characterized in that said drive sheave (2) and said counter sheave (3) of said drive sheave drive are vertically arranged with respect to one another and in the area of said shaft head in the area of said shaft pit.
11. The gearless cable-operated elevator under claim 1, characterized in that said drive sheave (2) and said counter sheave (3) of said drive sheave drive are arranged in perpendicular to one another and in the area of said elongated counterweight room in said shaft.
12. The gearless cable-operated elevator under claim 1, characterized in that said drive sheave (2) and said counter sheave (3) of said drive sheave drive are arranged on bottom or on the roof of said cage (6).
13. The gearless cable-operated elevator under claim 1, characterized in that said drive sheave drive is fixed to said elevator frame.
14. The gearless cable-operated elevator under claim 12, characterized in that said holding elements for said drive sheave drive are integrated in said cage frame or cage main support.
15. The gearless cable-operated elevator under claim 1, characterized in that said a cage suspension is effected with a ratio of 1 to 1.

16. The gearless cable-operated elevator under claim 1, characterized in that said a loose pulley cage suspension is effected with a ratio of 2 to 1 or 4 to 1.
17. The gearless cable-operated elevator under claim 1, characterized in that said carrier cables are steel cables, preferably single-layer round core cables.
18. The gearless cable-operated elevator under claim 1, characterized in that said motor of said drive sheave drive is a three-phase asynchronous or three-phase synchronous motor.
19. The gearless cable-operated elevator under claim 1, characterized in that said motor of said drive sheave drive is embodied without mechanical emergency stop braking device.
20. The gearless cable-operated elevator under claim 1, characterized in that said on said cage (6) a double brake is arranged as emergency stop braking device, which acts on both sides of at least one guide rail for said cage (6).
21. The gearless cable-operated elevator under claim 20, characterized in that said braking device is a double disk clasp brake.